

## DSL RATE ADAPTATION

## ABSTRACT

A method for enhancing the bit rate and/or margin at which quadrature amplitude modulation (QAM) communication is performed includes the steps of varying a spectral allocation and constellation size with which communication is performed, so as to define a combination of spectral allocation and constellation size at which the bit rate and/or margin are enhanced. The spectral allocation can be varied by varying a stop frequency thereof, while maintaining a substantially constant start frequency, so as to mitigate undesirable high frequency content of the bandwidth. Alternatively, both start and stop frequencies may be varied.

NEC/llb

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